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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,247	08/04/2003	Joseph P. Odenwalder	PA510B1C1	7773
23696	7590	09/23/2004	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			NGUYEN, DUC M	
			ART UNIT	PAPER NUMBER
			2685	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/634,247	ODENWALDER, JOSEPH P.	
	Examiner	Art Unit	
	Duc M. Nguyen	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3-19-4</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore,
 - the “search excursion period begins during the first frame and continues through an initial portion of a second frame” as recited in claims 1, 7, 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
 - the step of “increase the amount of power allocated to symbols transmitted on the first frequency during the remaining portion of the second frame” as recited in claims 3-4, 9-10, 15-16 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR

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1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

2. The references listed in the information disclosure statements submitted on 3/19/04 has been considered by the examiner (see attached PTO-1449).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 1, 7, 13 recite the limitation "the search excursion period begins during the first frame and continues through an initial portion of a second frame", and claims 3-4, 9-10, 15-16 recite the limitation "increase the amount of power allocated to symbols transmitted on the first frequency during the remaining portion of the second frame". These limitations was not described in the

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specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 5-7, 11-13, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Czaja** (US Patent Number **6,078,570**).

Regarding claim 1, **Czaja** discloses an apparatus comprising:

a quality measurement circuit (see MAHO measurement, col. 4, lines 35-37), and

a power control processor configured to tune a receiver to a first frequency during an initial portion of a first frame, to tune the receiver on a second frequency during a search excursion period (see col. 4, lines 51-55),

wherein the search excursion period begins during the first frame and continues through an initial portion of a second frame, wherein the second frame follows immediately after the first frame, to direct the quality measurement circuit to measuring at least one signal attribute on the second frequency during the search excursion period, and to tune the receiver on the first frequency during a remaining portion of the second frame (see Active search time in Fig. 4 and col.

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8, lines 44-53). Here, since Czaja mentions that the Active search time can be continued to next frame if necessary, it would have been obvious that the search would continue through an initial portion of a second frame, in order to complete measurements if needed (several pilots search) while ensuring that data lost may be recovered (not too long).

Regarding claim **5**, it is rejected for the same reason as set forth in claim **1** above. In addition, **Czaja** discloses a report generation of measurement as claimed (see col. 7, lines 62-64).

Regarding claim **6**, it is rejected for the same reason as set forth in claim **1** above. In addition, **Czaja** discloses a report generation of measurement on a first frequency as claimed (see PCG 11 and old frequency in Fig 4 and col. 7, lines 60-64).

Regarding claims **7, 13**, they are interpreted and rejected for the same reason as set forth in claim **1** above.

Regarding claims **11, 17**, they are interpreted and rejected for the same reason as set forth in claim **5** above.

Regarding claims **12, 18**, they are interpreted and rejected for the same reason as set forth in claim **6** above.

6. Claims **2, 8, 14** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Czaja** in view of **Dahlman et al** (PCT Pub. Number **WO 97/40592**).

Regarding claims **2, 8, 14**, **Czaja** discloses all the claimed limitations, see claim **1** above, except for increasing the amount of power during the frequency

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search excursion. However, **Dahlman** discloses a handoff method for scanning another frequency during an idle time period, wherein the transmission power is increased during the frequency search excursion (duty cycle) and is gradually decreased after frequency search excursion (see Fig. 3B and col. 15, lines 6-16, col. 17, lines 16-19), for maintaining transmission quality during the frequency search excursion. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of **Dahlman** to **Czaja** to increase transmission power before tuning to the new target frequency, to compensate for power loss due to sampling process in order to maintain transmission quality during the frequency search excursion.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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8. Claims 1-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7-8 of U.S. Patent No. 6,603,751 to Odenwalder in view of Czaja (US 6,078,570).

Regarding claims 1, 7, 13, Odenwalder discloses a method for measuring signal strength during a frequency search excursion period (see claim 7), which would include all the claimed limitation except for the search excursion period begins during the first frame and continues through an initial portion of a second frame. However, Czaja discloses a method for measuring signal strength during a frequency search excursion period (see Active search time in Fig. 4 and col. 8, lines 44-53), wherein Czaja mentions that the Active search time can be continued to next frame if necessary, which would have been obvious that the search would continue through an initial portion of a second frame, in order to complete measurements if needed while ensuring that data lost may be recovered. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Czaja to Odenwalder for providing a search excursion period as claimed, in order to complete measurements if needed while ensuring that data lost may be recovered.

Regarding claims 2-6, 8-12, 14-18, they are interpreted and rejected for the same reason as set forth in claim 1 above. In addition, Odenwalder as modified would disclose the step of increasing the amount of power as claimed (see claim 8), to minimize loss of forward and reverse symbols impacted by sampling of the search frequency.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- **Sarkar et al** (US Patent Number 6,587,446), Handoff in a wireless communication system.

- **Wright et al** (US Patent Number 6,047,165), Wireless frequency-agile spread spectrum ground link-based aircraft data communication system.

- **Storm et al** (US Patent Number 6,144,649), Method and apparatus for acquiring a pilot signal in a CDMA receiver.

- **Tiedemann, Jr. et al** (US Patent Number 5,999,816), Method and apparatus for performing MAHO between communication systems.

- **Li et al** (US Patent Number 6,185,431), Mobile station closed loop output power stability system for weak signal condition.

- **Kuo et al** (US Patent Number 6,181,943), Method and apparatus for inter-frequency handoff in wireless communication systems.

- **Black** (US Patent Number 6,134,440), Method and apparatus for performing mobile station assisted hard handoff using offline searching.

10. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

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(703) 872-9314 (for formal communications intended for entry)

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist).

Any inquiry concerning this communication or communications from the examiner should be directed to Duc M. Nguyen whose telephone number is (703) 306-4531, Monday-Thursday (9:00 AM-5:00 PM). Or to Edward Urban (Supervisor) whose telephone number is (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Duc M. Nguyen



Sept 17, 2004